

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A latching assembly for a door of a motor vehicle having a main electric power supply and a striker, said latching assembly comprising:

a ratchet selectively rotatable with the striker to latch and unlatch the door;

a pawl selectively engagable with said ratchet to selectively prevent said ratchet from rotating;

a motor electrically connected to the main electric power supply and operatively connected to said pawl for pivoting said pawl into and out of engagement with said ratchet; [[and]]

a backup battery disposed adjacent said motor for supplying electric power when said ~~motors~~ motor is disconnected [[form]] from the main electric power supply;

a battery charger electrically connected to the main electric power supply and said backup battery, said battery charger adapted for charging said backup battery;

a capacitive element storing a charge for immediate discharge to said motor when said motor is disconnected from the main electric power supply;

a diagnostics module electrically connected to said capacitive element, said diagnostics module monitoring a leakage current of said capacitive element; and

a microcontroller electrically connected to said backup battery, said battery charger, and said diagnostics module, said microcontroller monitoring a voltage of said backup battery and controlling said battery charger in response to detecting a low voltage of said backup battery.

said microcontroller monitoring the recharging of said backup battery to determine whether said backup battery is worn, said microcontroller receiving signals from said diagnostics module related to said leakage current to determine a failure of said capacitive element, and said microcontroller monitoring the discharge of said capacitive element when said motor is disconnected from the main electric power supply to determine the health of said capacitive element.

2. (Cancelled)

3. (Currently amended) A latching assembly as set forth in claim [[2]] 1 including a voltage sensor for sensing the voltage provided by the main electric power supply.

4. (Original) A latching assembly as set forth in claim 3 including a converter for charging and maintaining said capacitive element.

5. (Original) A latching assembly as set forth in claim 4 wherein said converter is a DC/DC converter.

6. (Original) A latching assembly as set forth in claim 5 wherein said capacitive element includes a plurality of capacitors.

7. (Currently amended) A latching assembly as set forth in claim 6 ~~including a~~ wherein said microcontroller for monitoring monitors said plurality of capacitors.

8. (New) A latching assembly for a door of a motor vehicle having a main electric power supply and a striker, said latching assembly comprising:

a ratchet selectively rotatable with the striker to latch and unlatch the door;

a pawl selectively engagable with said ratchet to selectively prevent said ratchet from rotating;

a motor electrically connected to the main electric power supply and operatively connected to said pawl for pivoting said pawl into and out of engagement with said ratchet;

a backup battery disposed adjacent said motor for supplying electric power when said motor is disconnected from the main electric power supply;

a battery charger electrically connected to the main electric power supply and said backup battery, said battery charger adapted for charging said backup battery;

a capacitive element storing a charge for immediate discharge to said motor when said motor is disconnected from the main electric power supply;

a diagnostics module electrically connected to said capacitive element, said diagnostics module monitoring a leakage current of said capacitive element; and

a microcontroller electrically connected to said diagnostics module, said microcontroller receiving signals from said diagnostics module related to said leakage current to determine a failure of said capacitive element, and said microcontroller monitoring the discharge of said capacitive element when said motor is disconnected from the main electric power supply to determine the health of said capacitive element.